

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

1-10. (cancelled)

11. (currently amended) A catheter comprising:

a first catheter tube having a proximal end and a distal end, the first catheter tube at least two superposed layers of materials, including an inner layer formed of a first material and an outer layer formed of a second material, each of the inner layer and the outer layer extending from the proximal end to the distal end of the first catheter tube, secured together with a polymeric mediator layer adhered to both the inner layer and the outer layer, and with the first and second materials having mechanical properties differing from one another, the inner layer defining a lumen in the first catheter tube and the outer layer defining an outer surface of the first catheter tube; [[,]]

a polymeric mediator layer disposed between the inner layer and the outer layer such that the inner layer is not in direct contact with the outer layer, the mediator layer having an outer surface adhered to the outer layer and the mediator layer having an inner surface adhered to the inner layer; and

a balloon sealingly surrounding the first catheter tube; [[,]]

wherein whereby the inner layer first material comprises high-density polyethylene and forms the lumen, and the outer layer second material comprises a polymer and forms an outer surface of the first catheter tube, wherein the first catheter tube includes a distal end and the outer layer extends to the distal end of the first catheter tube.

12. (previously presented) A catheter as in claim 11, wherein the mediator layer comprises low-density polyethylene.

13. (previously presented) A catheter as in claim 11, wherein the outer layer comprises polyamide.

14. (previously presented) A catheter as in claim 11, further comprising: a second catheter tube disposed about the first catheter tube.

15. (previously presented) A catheter as in claim 14, wherein a proximal end of the balloon is connected to a distal end of the second tube, and a distal end of the balloon is connected to the distal end of the first catheter tube.

16. (currently amended) A catheter comprising:

a catheter tube ~~having at least two superposed layers of materials~~, including an inner layer formed of a first material and an outer layer formed of a second material, the first and second materials having secured together and with mechanical properties differing from one another, the inner layer defining a guidewire lumen in the catheter tube for the sliding fit of a guidewire and the outer layer defining an outer surface of the catheter tube; [[,]]

a mediator layer disposed between the inner layer and the outer layer such that the inner layer is not in direct contact with the outer layer, the mediator layer having an outer surface adhered to the outer layer and the mediator layer having an inner surface adhered to the inner layer; and

a balloon with a distal end sealingly surrounding the outer layer of the catheter tube; [[,]]

wherein the ~~inner layer~~ first material comprises high-density polyethylene ~~and forms the guidewire lumen~~, and the ~~outer layer~~ second material comprises a polyamide; ~~and forms an outer surface of the catheter tube~~, and

wherein the ~~catheter tube further comprises~~ a mediator layer ~~providing~~ provides adhesive anchorage between the inner layer and the outer layer.

17. (previously presented) A catheter as in claim 16, wherein the mediator layer comprises low-density polyethylene.

18. (currently amended) A catheter comprising:

- (a) a tube comprising:
  - (i) an outermost layer comprising a polymer having a first coefficient of friction;
  - (ii) an innermost layer coextensive with the outermost layer and forming a lumen, the innermost layer comprising a high-density polyethylene having a second coefficient of friction which is less than the first coefficient of friction; and
  - (iii) a middle layer disposed between the outermost layer and the innermost layer, the middle layer having an outer surface adhered to the outermost layer, and the middle layer having an inner surface adhered to the innermost layer ~~and affixing the outermost layer to the innermost layer~~; and
- (b) a balloon sealed to the tube.

19. (previously presented) The catheter of claim 18, wherein the middle layer comprises low-density polyethylene.

20. (currently amended) A catheter comprising:

- (a) a first tube comprising:
  - (i) an outermost layer comprising a polymer having a first coefficient of friction;
  - (ii) an innermost layer coextensive with the outermost layer and forming a lumen, the innermost layer comprising a high-density polyethylene having a second coefficient of friction which is less than the first coefficient of friction; and
  - (iii) a middle layer disposed between the outermost layer and the innermost layer, the middle layer having an outer surface adhered to the outermost layer, and the middle layer having an inner surface adhered to the innermost layer ~~and affixing the outermost layer to the innermost layer~~;
- (b) a second tube disposed about a portion of the first tube; and
- (c) a balloon with a distal end sealingly surrounding the outermost layer of the first tube and a proximal end sealingly surrounding the second tube.

21. (previously presented) The catheter of claim 20, wherein the middle layer comprises low-density polyethylene.

22. (new) The catheter of claim 11, wherein the mediator layer extends continuously from the first end to the second end of the first catheter tube.

23. (new) The catheter of claim 18, wherein the outermost layer is spaced away from the innermost layer by the middle layer.

24. (new) The catheter of claim 20, wherein the outermost layer is spaced away from the innermost layer by the middle layer.